# INEOS ABS

July 23, 2010

Attn: Compliance Tracker, AE-17J Air Enforcement and Compliance Assurance Branch U.S. Environmental Protection Agency Region 5 77 West Jackson Boulevard Chicago, Illinois 60604

RE:

Consent Decree Civil Action No. 1:09-CV-545

Effective Date February 4, 2010

Dear Sirs:

Please find attached the Semiannual Report for the First Half 2010. Please contact me at (513) 467-2470 or michele.smith@lustran-polymers.com if you have any questions concerning the submitted information.

Respectfully Submitted,

**Environmental Specialist** 

INEOS ABS (USA) Corporation

cc:

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# INEOS ABS (USA) CORPORATION'S ADDYSTON, OH PLANT CONSENT DECREE SEMIANNUAL REPORT

Consent Decree Civil Action No. 1:09-CV-545 Effective Date February 4, 2010

Reporting Period: 02/04/10 - 06/30/10

#### I. INTRODUCTION

The following report contains the required information about INEOS ABS' compliance activities associated with the requirements in Paragraph 50 a. and 50 b. in the Consent Decree.

### II. COMPLIANCE REQUIREMENTS

Per Section VI (Compliance Requirements) of the Consent Decree, INEOS ABS met the following compliance requirements:

## A. FLARE COMPLIANCE REQUIREMENTS

1. Steam-to-Vent Gas Ratio < 3.6 to 1 as a 1-hour Block Average (Paragraph 18 a.)

No deviations in the first half of 2010.

2. Net Heating Value of Vent Gas > 385 BTU/scf as a 1-hour Block Average (Paragraph 18 b.)

Several deviations occurred from February 4, 2010 to February 10, 2010 as explained in Part IV.A. below.

- NHVFG > 200 BTU/scf as a 1-hour Block Average (Paragraph 19)
   Not a requirement during this reporting period.
- 4. Flare Monitoring Requirements (Paragraph 20 & 23)

Required data was measured, calculated, and recorded at all times that the Process P001 Flare was in operations and reports were submitted monthly as stated in the Quarterly Reports.

5. Flare Monitoring Instruments Standard Operating Procedure (SOP) (Paragraphs 21 & 22)

The SOP was submitted on March 5, 2010. Conditional approval from U.S. EPA was received on June 7, 2010. INEOS ABS submitted a Notice of Dispute on June 24, 2010, which has yet to be resolved.

6. Passive FTIR (Paragraph 24)

The Passive FTIR Work Plan was submitted August 17, 2009 and a revised Passive FTIR Work Plan was submitted September 28, 2009. The U.S. EPA approved the Passive FTIR Work Plan on October 28, 2009. The testing was performed November 3 through November 5, 2009. The Passive FTIR Test Report was submitted on July 6, 2010, which will be supplemented on or before August 6, 2010, as agreed upon by the parties of this Consent Decree.

7. P001 Process Evaluations (Paragraph 25)

Evaluations were sent to Hamilton County Department of Environmental Services (HCDES) for detections of 1,3-butadiene on February 1, 2010 and April 2, 2010 on March 5, 2010 and May 7, 2010, respectively (i.e., within fifteen days of receiving sampling results).

#### **B. BIOFILTER PROJECT**

1. Biofilter Work Plan (Paragraph 28)

The Biofilter Work Plan was submitted on March 19, 2010 and approved by Ohio EPA on April 14, 2010

2. Biofilter Operations and Monitoring Plan (Paragraph 28 a.)

This plan is not required until construction and emission testing is completed.

3. Quarterly Deviation Reports (Paragraph 28 b.)

Quarterly reports are not required until construction and emission testing is completed.

4. Biofilter Installation Schedule (Paragraph 29)

The purchase orders were submitted to the contractor on May 12, 2010 and construction was initiated on June 11, 2010.

#### C. EMISSION UNIT P035 SCRUBBER PROJECT

This emission unit continues to be idle and hence there are no compliance requirements for this project (Paragraphs 30 & 31).

# D. MAIN DUCT LEAK DETECTION AND REPAIR (LDAR) STANDARD OPERATING PROCEDURE (SOP)

The Main Duct LDAR SOP was submitted on March 5, 2010 and awaiting U.S. EPA approval (Paragraphs 32 & 33).

#### E. ENHANCED LEAK DETECTION AND REPAIR (APPENDIX A)

1. Part A: General

A written facility-wide LDAR Program Plan was written by May 4, 2010.

2. Part B: Monitoring Frequency

Monitoring frequencies were increased on January 1, 2010 (prior to the Effective Date of the Consent Decree). There were three instances where monitoring was not performed in the required timeframe. See Part IV. B., C., and D. below for details.

3. Part C: Monitoring Methods and Equipment

As of May 4, 2010 for all Covered Equipment except connectors and as of June 3 for connectors, Method 21 is being used to perform monitoring using a Toxic Vapor Analyzer 1000B Flame Ionization Detector attached to a datalogger which directly electronically records the required data. The monitoring data is transferred to an electronic database daily as of January 1, 2010. As of January 1, 2010 (prior to the Effective Date of the Consent Decree), calibration of the LDAR monitoring equipment is being performed per Method 21 and calibration drift assessment are performed prior to and completion of each monitoring shift.

4. Part D: LDAR Action Levels

Lower leak repair action levels were implemented on January 1, 2010 (prior to the Effective Date of the Consent Decree).

5. Part E: Leak Repairs

There was one instance when a leak was not repaired in the required timeframes. See Part IV. B. below for details. As of February 4, 2010, Quasi-Directed Maintenance is being performed during all repair attempts. Forty-nine leaking valves were repaired that a drill and tap repair was not performed as it is a significant safety risk to perform drill and tap on valves in HAP service as the materials inside the piping is flammable and/or highly explosive.

#### 6. Part F: Delay of Repair (DOR)

As of January 1, 2010 (prior to the Effective Date of the Consent Decree), the plant manager or his designee signs all DOR. As of March 5, 2010, the Covered Equipment on the DOR list continues to be monitored at their required frequency.

7. Part G: Equipment Replacement/Improvement Program (ERIP)

A list of all valves in the LDAR Program was submitted on March 5, 2010. No other requirement in the ERIP is required at this time.

8. Part H: Management of Change (MOC)

Prior to the Effective Date of the Consent Decree, the facility had a MOC process that required a review of environmental issues by the initiator of the MOC. The initiator decided whether a review from the Environmental Department was warranted. As of June 10, 2010, all MOC documentation requires a review by the Environmental Department.

9. Part I: Training

As of June 11, 2010, a training protocol was created to train all employees and contractors on their duties in the LDAR Program. Initial training was completed in May and June 2010. More detailed training for supervisors is being performed on July 22, 2010 and for contractors on July 28, 2010.

10. Part J: Quality Assurance/Quality Control (QA/QC)

Prior to May 4, 2010, on a daily basis, technicians are certifying that the data collected represents that monitoring performed. Two QA/QC audits were completed on March 31, 2010 and June 30, 2010. Corrective actions are still being addressed from these audits.

11. Part K: LDAR Audits and Corrective Actions

The external LDAR Audit began on May 4, 2010 and is still in progress. No corrective action plans were required to be submitted during this period as the audit has not been completed and a corrective action plan has not been created.

12. Part L: Certification of Compliance

No certificates of compliance were required to be submitted during this period.

13. Part M: Recordkeeping

All records are being kept as required in Appendix A of the Consent Decree.

14: Part N: Reporting

No compliance status reports were required to be submitted during this period.

#### F. PERMITS

No permits were required to be completed and/or submitted in the first half of 2010 (Paragraphs 35 through 39).

#### G. CERCLA/EPCRA REQUIREMENTS

1. Spill/Release Reporting Policy (Paragraph 41)

The policy was revised on April 4, 2010.

2. Reportable Quantity Root cause Analysis (Paragraph 42)

There have been no reportable quantity air releases in the first half of 2010.

3. Training (Paragraph 43)

Release reporting training procedure was updated and training performed by May 31, 2010

- 4. Program Evaluation and Report (Paragraph 44 through 47)
  The program evaluation began on March 5, 2010 and was completed on May 4, 2010. The report was submitted on June 3, 2010. TRI reports for reporting years 2005 and 2008 were amended on June 25, 2010 to include sodium nitrite as it had not been reported in those years. A review of the TRI report for reporting year 2009 was completed on May 28, 2010 (Paragraph 44 b.).
- 5. Program Evaluation Corrective Actions (Paragraph 48)
  All corrective actions identified in the Program Evaluation Report were completed by June 30, 2010.

#### H. AMBIENT AIR MONITORING

INEOS ABS continues to reimburse HCDES for costs associated with the analysis of samples collected at the monitoring location at Meredith Hitchens Elementary School.

#### III. COSTS INCURRED DURING PERIOD

Per Paragraph 50 a. of the Consent Decree, the following costs were incurred by INEOS ABS during the first half of 2010:

| LDAR Technician/Maintenance | \$42,000 |
|-----------------------------|----------|
| LDAR Monitoring Equipment   | \$5,000  |
| Equipment Replacements      | \$8,500  |
| Total                       | \$55,000 |

#### IV. NONCOMPLIANCE WITH CONSENT DECREE

Per Paragraph 50 b. of the Consent Decree, INEOS ABS submitted the following letters of noncompliance to the U.S. EPA and Ohio EPA during the first half of 2010:

#### A. Net Heating Value Below 385 BTU/scf - Letter Dated March 9, 2010

From the Effective Date of the Consent Decree (February 4, 2010) until February 17, 2010, there were periods of time that the Net Heating Value of the Vent Gas sent to the Flare was less than the required 385 BTU/scf as a one-hour block average as required by Paragraph 18.b. This noncompliance was recognized on February 10, 2010 and corrective action was taken to re-write computer logic to increase the supplemental natural gas addition in order to meet this requirement. The corrective action was completed on February 17, 2010.

#### B. LDAR Missed and Late Monitoring - Letter Dated April 1, 2010

Two pumps in the LDAR program and on the Delay of Repair list were not monitored in February 2010 as required by Paragraph 17.b. in Appendix A of the Consent Decree. In addition, two valves were not repaired within the required timeframes. One valve was repaired within five days, but was not re-screened for verification until two days past the five day deadline. One valve was "final repaired" within the fifteen days, but was not re-screened for verification until three days past the fifteen day deadline. Both of these valves had passed the repair attempts. These issues were uncovered in the required LDAR quarterly Quality Control/Quality Assurance audit conducted in the first quarter of 2010.

## C. LDAR Missed Monitoring - Letter Dated April 15, 2010

Seven valves were not monitored in the first quarter 2010. As we have continued to improve our LDAR program, we have on occasion found valves and/or connectors that had not been in the program previously. When this occurs, we immediately add them into the LDAR program and perform monitoring. Seven valves were discovered on April 9, 2010, and were subsequently added into the LDAR program. These valves were monitored on April 10, 2010. None of these valves had Screening Values above the leak repair action levels.

D. LDAR Missed Monitoring and Inspections – Letter Dated May 11, 2010

During the second quarter 2010 monitoring in Process Unit P021, it was discovered that seven valves had not been monitored in first quarter 2010, as they had not been identified as being a part of the LDAR program. These valves were added into the LDAR program and subsequently monitored. In addition, it appears that historically, weekly visual inspections of agitators had not been completed throughout the plant as required by 40 CFR 63.173(b)(1). This issue was uncovered in follow-up activities associated with the required LDAR quarterly Quality Control/Quality Assurance audit conducted in the first quarter of 2010. Weekly inspections of agitators started the week of May 10, 2010.

#### **V. CERTIFICATION**

I certify under penalty of law that I have examined and am familiar with the information in the enclosed documents, including all attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for knowingly submitting false statements and information, including the possibility of fines or imprisonment pursuant to Section 113(c)(2) of the Act, and 18 U.S.C.§§ 1001 and 1341.

Respectfully Submitted,

Clinton Herring

General Manager, NAFTA

INEOS ABS (USA) Corporation

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